

BEFORE THE
Federal Communications Commission

WASHINGTON, D.C. 20554

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In the Matter of

Amendment to Section 90.621(c) and
(d) of the Commission's Rules and
Regulations Concerning Separations
Between 800 and 900 MHz Land
Mobile Radio Systems in the
Business and General Category
Radio Service Pools

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RM-8028

To: The Commission

**STATEMENT IN SUPPORT
OF THE
COMMONWEALTH EDISON COMPANY**

Commonwealth Edison Company (CECo), by its attorneys
and pursuant to Section 1.405(a) of the Rules and
Regulations of the Federal Communications Commission
(Commission), hereby respectfully submits this Statement in
Support of the Petition for Rule Making of the National
Association of Business and Educational Radio, Inc. (NABER)
filed with the Commission on March 6, 1992.^{1/}

I. PRELIMINARY STATEMENT

1. CECo's headquarters are located in Chicago,
Illinois. CECo generates electricity and distributes it to

^{1/} Public Notice, Report No. 23944, Petitions for
Rulemaking Filed, released July 13, 1992.

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east to the Arizona border, and north to the Mono Lake region. Within this 50,000 square mile expanse, SCE serves over four million residences, schools, hospitals, businesses, and governmental facilities. In total, SCE provides electricity to approximately nine million people, i.e., to one in every 29 people in the nation.

2. To ensure its essential service is provided safely and efficiently to all these people, businesses, and locations, SCE maintains a large, complex internal telecommunications network. SCE extensively employs the public switched telephone network, private wire and fiber lines, microwave facilities, and, of course, land mobile radio. While each of the telecommunications elements is critical, SCE's land mobile network is perhaps the most important in enabling SCE to meet its enormous public safety and public service obligations. Land mobile communications are indispensable to the maintenance, repair and emergency preparedness activities associated with SCE's distribution system, its generating plants, and its major transmission lines.

3. SCE currently operates an 800 MHz trunked system at its San Onofre Nuclear Generating Station. SCE also is in the process of implementing a wide-area 900 MHz system to

provide land mobile coverage across the utility's entire 50,000 square-mile service territory. Once completed, SCE's 900 MHz system will be one of the largest, most sophisticated, private land mobile networks in the country. As the licensee of these significant 800 MHz and 900 MHz facilities, SCE has a strong interest in the issues raised in NABER's Petition.

II. STATEMENT IN PARTIAL SUPPORT

4. NABER's Petition seeks a more stringent co-channel separation standard for 800/900 MHz systems which employ frequencies from the Business and General Category frequency pools. Specifically, NABER asks the Commission to change the current 40/30 dBu standard to a 40/22 dBu standard.^{2/} The proposal does not include the Industrial/Land Transportation or Public Safety Service channels. NABER leaves it to the Commission's discretion whether to

^{2/} The proposal is similar to the one NABER offered in the proceeding which led to the strengthening of the interference criteria for systems operating on SMR channels. However, NABER argues in this Petition against the adoption of a 40/22 dBu table similar to the one established for the SMR pool. See Report and Order, PR Docket No. 90-34, Amendment of Part 90 of the Commission's Rules to Permit the Short-Spacing of Specialized Mobile Radio Systems Upon Concurrence from Co-Channel Licensees, 6 FCC Rcd. 4929 (1991).

include these frequency pools in any rule making initiative.

5. SCE supports NABER's recommendation to implement a 40/22 dBu standard for the Business and General Category channels. In addition, SCE urges the Commission to adopt this standard for the 800/900 MHz Industrial/Land Transportation channels.^{3/}

6. The proposed 40/22 dBu standard is wholly consistent with the Commission's finding in PR Docket No. 90-34 that the 30/40 dBu standard is not responsive to contemporary operating conditions. That proceeding dealt with SMR systems. Nonetheless, the rationale applies equally to today's Business, General Category, and Industrial/Land Transportation systems. Today's systems employ mobile units with more sensitive receivers than were available when the Commission first made the 800/900 MHz spectrum available. This has greatly increased the

^{3/} As a practical matter, SCE notes that employment of the 40/22 dBu contour in coordination of only Business and General Category channels would be cumbersome and administratively burdensome. Industrial/Land Transportation, Business and General Category eligibles access "each other's" channels to expand existing trunked systems. Use of one interference criteria for a portion of the assigned channels, and another criteria to recommend additional channels would cause undue confusion and administrative difficulties in Commission's processing of these applications.

capability of today's systems, but it also creates a need for greater co-channel protection.^{4/}

7. Unfortunately, NABER's Petition also indirectly suggests that the Commission should continue to employ the R-6602 methodology in calculating the relevant contours. SCE objects to this aspect of the Petition. SCE has found that the R-6602 methodology often poorly predicts actual propagation in the irregular terrain of Southern California. Consequently, it inadequately protects existing co-channel systems from applicants who seek to "engineer in" new systems. SCE believes that the so-called TechNote 101 methodology, which is based on the more accurate Longley-Rice RF propagation model, is a superior methodology. SCE, therefore, urges the Commission, in initiating a rule making proceeding, to address this larger issue and to adopt the more accurate propagation model.

8. SCE's practical experience with 800/900 MHz systems in the Los Angeles Basin and the rest of Southern California demonstrates that the Commission's R-6602

^{4/} SCE concurs with NABER that the Commission should not attempt to structure a table, as it did in PR Docket No. 90-34, and should continue to permit the frequency coordinator to review the 40/22 dBu analysis based on the actual operating parameters of the existing and proposed systems.

methodology is often extremely inaccurate in predicting actual propagation. The R-6602 methodology is highly generalized and relies on a "flat earth" model of RF propagation. Use of the methodology often results in extremely smooth, rounded contours, regardless of intervening terrain or, conversely, of circumstances conducive to propagation over long distances. The relatively simplistic R-6602 methodology may adequately serve the Commission's and applicants' purposes where the terrain indeed is flat, but it is wholly inadequate in describing the true service area of systems operating in the irregular terrain of Southern California. Use of the TechNote 101/Longley-Rice would more accurately address the Commission's true concern with co-channel protection.

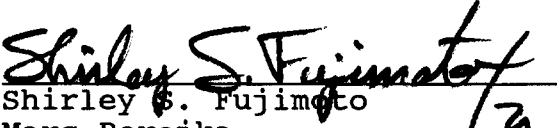
9. SCE, like the majority of licensees in the 800/900 MHz Industrial/Land Transportation services, has extensive, critical systems. The infrastructures necessary to construct and operate the systems require a significant investment. Utilizing a propagation method that is not applicable in many areas of the country, such as the R-6602 methodology, jeopardizes the operations of these critical systems and the underlying investments. In addition to adopting a co-channel separation standard that more adequately serves the needs of today's systems, then, the

Commission ought to also adopt a more realistic method of determining whether that standard is met.

WHEREFORE, THE PREMISES CONSIDERED, Southern California Edison Company encourages the Commission to grant NABER's Petition and to initiate a rule making procedure to amend Section 90.621(c) and (d) to provide a 40/22 dBu contour standard for the coordination of Industrial/Land Transportation, Business, Public Safety, and General Category channels. Further, in its Notice of Proposed Rule Making, the Commission should propose that the TechNote 101 methodology should be employed in calculating these contours.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

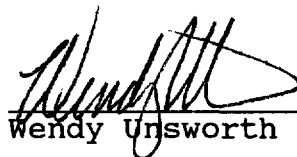
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Dated: August 12, 1992

CERTIFICATE OF SERVICE

I, Wendy Unsworth, a secretary at the law firm of Keller and Heckman, do hereby certify that on the 12th day of August 1992, I forwarded to the parties listed below a copy of the foregoing Statement in Partial Support of Southern California Edison Company by first-class mail, postage pre-paid:

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